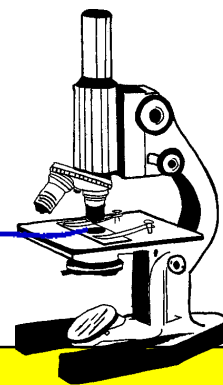


**A CURRENT
EDUCATIONAL
BULLETIN FOR
SUBMITTING LAW
ENFORCEMENT
AGENCIES**

A Closer Examination From The Benchtop...

UNDER^{the}SCOPE



MISSOURI STATE HIGHWAY PATROL • CRIME LABORATORY DIVISION

PHONE: 573-526-6134

FAX: 573-751-9922



ONLY TABLETS CONTAINING CONTROLLED SUBSTANCES NEED TO BE SUBMITTED. FOR FREE TABLET IDENTIFICATION, CONTACT POISON CONTROL AT 800-392-9111-2-2.

IF A DEFENDANT HAS PLED AND YOU HAVE NOT RECEIVED A LAB REPORT, IMMEDIATELY NOTIFY US THAT ANALYSIS IS NO LONGER NECESSARY TO ALLOW US TO EXPEDITE OTHER PENDING CASEWORK.

WHEN EXAMINING OR PROCESSING A CRIME SCENE FOR EVIDENCE, WEARING EXAMINATION GLOVES IS ESSENTIAL, NOT ONLY TO MINIMIZE CONTAMINATION, BUT FOR EVIDENCE INTEGRITY, AS WELL. FOR EXAMPLE, IF YOU ARE PROCESSING FOR LATENT PRINTS WITHOUT GLOVES, YOUR PRINTS COULD EITHER BECOME ASSOCIATED WITH THE CRIME SCENE, OR YOU COULD DAMAGE ANY PRINTS THAT EXIST.



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Firearms, Toolmarks, & Impression Experts Offer Evidence Collection Hints

The Missouri State Highway Patrol Crime Laboratory is able to provide your agency with high quality forensic science services in several disciplines, and the Firearms section is no exception. The section analyzes not only firearm evidence, but toolmark and impression evidence, as well. Because this section frequently receives requests for evidence collection materials, products, and techniques, the criminalists have compiled a reference to the more commonly asked questions.

EVIDENCE COLLECTION PRODUCTS

Several vendors offer evidence collection products specifically for the law enforcement officer. These companies have product catalogs available for your agency.

Kinderprint	800-227-6020
Lightning Powder Co	800-852-0300
Sirchie	800-356-7311
Lynn Peavey	800-255-6499
ODV, Inc	800-422-3784
EVI-PAQ	800-377-0450
Faurot	800-572-4603

CASTING MATERIAL FOR IMPRESSIONS

Contact Heraeus Kulzer Corporation at 800-343-5336, and proceed to the Dental Products Division. The product is Die Keen, catalog number 46615. The approximate price is \$15.35 per 25 pound carton (shipping not included).

CASTING MATERIAL FOR TOOLMARKS

Contact Kinderprint at 800-227-6020. The specific product is Mikrosil (brown), catalog number 3-0100Brn. The approximate price is \$26.40 per kit (shipping not included). One kit should last for dozens of toolmarks.

GUN BOXES FOR LAB SUBMISSION

Rifle Boxes (50.5"x6.75"x3.25"):

Contact Kinderprint at 800-227-6020.

•Pack of 10: catalog number is 4-2700-10; approximate price is \$20.75 (shipping not included).

•Pack of 25: catalog number is 4-2700-25; approximate price is \$49.50 (shipping not included).

Handgun Boxes (12"x9"x2"):

Contact Missouri Vocational Enterprises at 573-751-6663. The catalog number is 215.SZ (price varies with quantity).

ZIPLOC BAG IMPRESSION CASTING

This method allows for easy casting of crime scene impression evidence. Upon securing and photographing footwear and tire tread impressions at a crime scene, the task at hand is to properly cast them for comparison purposes. Dental and die stones accurately capture the minute impression detail necessary to establish identifications. The curing strength of these types of casting materials eliminates the need for mixing bowls, spatulas, barriers, and reinforcement. Many agencies have used Plaster of Paris with limited success. However, using the Die Keen casting material and following these simple steps provide excellent impression results.

1. Fill a one gallon Ziploc bag with 2 pounds of Die Keen (sufficient to capture one footwear impression).
2. Add 12 oz. of water (a soda can is ideal).
3. Zip the bag, and mix to a thin batter consistency.
4. Unzip one end of the bag, and pour at one end of the impression.
5. Allow the casting material to flow naturally into the impression.
6. Allow the cast to harden for approximately 60 minutes before removing it.

You may need to modify your procedure according to the environment. For example, when casting an impression on a slope or grade, utilize a barrier to act as a dam. For larger or longer tire tread impressions, use more casting material and water, adjusting the ratios as necessary.

After lifting the impression, be sure to scribe or Sharpie your initials on the cast's backside. Do not remove the dirt or other residues on the cast, as the criminalist must clean the cast in a controlled lab environment. Finally, secure and properly seal the impression in a container, such as a sturdy cardboard box with cushioning material.

If you have any concerns over any firearms related topics, please contact 573-526-6134, and ask for Todd Garrison or Kathleen Green.